

Amendments to the Specification:

Please replace the paragraph beginning at page 4, line 24 with the following amended paragraph:

A¹
FIG. 3 is a flow chart depicting the steps associated with the joining of node S8 to the piconet 110. When S8 comes within the transmission range of the nodes operating within the piconet 110 and determines it is operational (step 120), node S8 transmits a notification message (step 130) indicating its desire to join the piconet 110. If all of the available AM_ADDRs are being used by nodes in the piconet 110, the master node M would not respond to S8's request to join the piconet 110. If available AM_ADDRs exist, the master node M receives this transmission from node S8 and assigns a temporary AM_ADDR to node S8 (step 140). This temporary AM_ADDR is subsequently replaced by a permanent address, as described more fully below. In a preferred implementation of the invention, certain pairs of the slave nodes S1 – S7 are assigned the same AM_ADDR but are also assigned different address extensions as well. As is described below, such extended addressing enables more than a single slave node to utilize a given AM_ADDR.

Please replace the paragraph beginning at page 5, line 5 with the following amended paragraph:

A²
Referring again to FIG. 3, in step 150 the master node M inquires as to whether node S8 supports the extended addressing format contemplated by the present invention. If node S8 does not support such extended addressing, the master node M assigns the originally chosen temporary AM_ADDR to node S8 (step 160). If, on the other hand, node S8 indicates that it is capable of supporting extended addressing, the master node M performs a series of calculations (described below with reference to FIG. 4) to determine if it will be feasible to permit node S8 to share an AM_ADDR with another slave node (step 170). If the master node M determines that node S8 may join the piconet 110, it becomes a slave node and is assigned an AM_ADDR as well as an address extension (collectively, an "extended AM_ADDR") uniquely distinguishing it from other slaves within the piconet 110 (step 180).